

**INSPECTORATE**

ISO 9001:2000 Certified

✓
✓

Certificate of Analysis

Vessel / Shore Tank : SHORE TANK 3
Product : #6 Fuel Oil
Client Reference : V-08-TANK TRANSFER
Terminal / Port / Office : SPRAGUE SEARSPORT
Job ID : 0020-0000565
Sample Details : AFTER TRANSFER FROM TK 4
Comments :

SP/08/0618
Sample Submitted By : IAC Searsport
Analysis Performed By : IAC Portland
Date Sampled : 27-Jun-2008
Date Reported : 29-Jun-2008
Submission ID : 2008-020-00739

Method	Test	UML Composite	
		2008-020-00739-004	
Method	Test	Result	Specification
ASTM D287	API Gravity, ° API-U,M,L, Calc Avg	14.1	10 Min
ASTM D1250	Density at 15°C	0.9713	
ASTM D4294	Sulfur Content, mass %-U,M,L Calc Avg	1.46	2.00 Max
ASTM D445	Kinematic Viscosity, cSt-U,M,L Calc Avg	433.6	
ASTM D2161	Test Temperature, ° F	122	
	Saybolt Furol Seconds, sec	205	75-300 (ssf)
ASTM D95	Water, % (v/v)	0.05	1.0 Max
ASTM D473	Sediment Content, mass % / vol %	0.02 / <0.01	0.1 Max
ASTM D1796	Water and Sediment, % (v/v)	0.100	1.0 Max
ASTM D93 Proc. B	Manual/Automated	Automatic	
	Flash Point, ° C / ° F	77.0 / 171	150 Min (F)
ASTM D482	Ash Content, mass %	0.0443	0.1 Max
IP 470	Aluminum, ppm (mg/kg)	35	
	Silicon, ppm (mg/kg)	44	
	Sodium, ppm (mg/kg)	26	60 Max
	Vanadium, ppm (mg/kg)	67	300 Max
ASTM D240	Gross Heat of Combustion Unit Conversion, BTU/l	18512 / 149818	
ASTM D4530	Carbon Residue, % (m/m)	11.1	21 Max
ASTM D97	Pour Point, ° C / ° F	0 / 32	60 Max
ASTM D6560	Asphaltenes, % (m/m)	2.7	14 Max
ASTM D287	API Gravity, ° API		
	Upper	14.1	
	Middle	14.1	
	Lower	14.1	
ASTM D4294	Sulfur Content, mass %		
	Upper	1.46	
	Middle	1.46	
	Lower	1.45	
ASTM D445	Kinematic Viscosity, cSt		
	Upper	438.0	
	Middle	424.4	
	Lower	438.4	
ASTM D 5762	NITROGEN, % WT.	0.3936	0.55 MAX.

SPRAGUE PROVIDES THE ATTACHED INSPECTION REPORT/ANALYSIS REPRESENTING THE SPECIFICATIONS OF THE PRODUCT AT THE SPRAGUE TERMINAL IN TANK ON THE DATE OF INSPECTION NOTED ON THE CERTIFICATE. THIS ANALYSIS IS PROVIDED TO THE CUSTOMER FOR THE PURPOSE OF ESTABLISHING THE INDEPENDENTLY VERIFIED PRODUCT SPECIFICATION ON A COMPOSITE BASIS IN SPRAGUE'S TERMINAL SHORE TANK AS NOTED ON THE CERTIFICATE. THE INSPECTION REPORT IS NOT TO BE USED FOR ANY OTHER PURPOSE. SPRAGUE DISCLAIMS ANY LIABILITY FOR THE PRODUCT AFTER DELIVERY BY SPRAGUE TO CUSTOMER. SPRAGUE DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR AN INTENDED USE EXCEPT AS MAY BE SPECIFICALLY SET FORTH IN WRITING IN ANY CONTRACT OR TERMS OF SALE BETWEEN SPRAGUE AND A BUYER OF PRODUCT. SPRAGUE ASSUMES NO LIABILITY FOR CLAIMS OR LOSSES THAT MAY ARISE FROM CUSTOMER'S USE OF THIS INSPECTION REPORT/ANALYSIS.

For Inspectorate: Signature On File

Richard Kennedy